Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report



Wednesday 14th October 2020 (covering week 41 2020)

Current level of influenza activity: Baseline activity

Influenza activity trend: Stable

Confirmed influenza cases since 2020 week 40: 1 (one influenza B.)

Key points - Wales

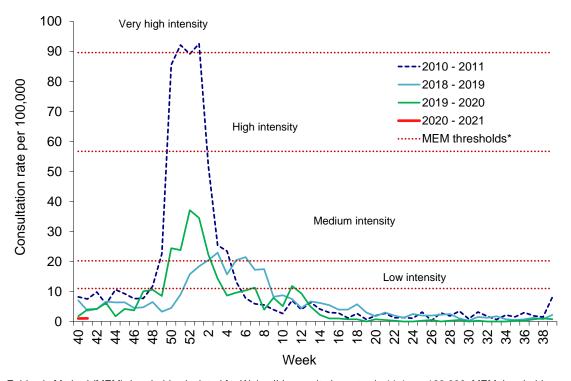
Surveillance indicators suggest that influenza is not currently circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) increased during week 41 (ending 11/10/2020). During week 41, one case of influenza was confirmed. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. Rhinovirus was the most commonly detected non-COVID-19 cause of Acute Respiratory Infection (ARI) but other causes of ARI continue to be detected. Surveillance data suggests the Respiratory Syncytial Virus (RSV) season is not yet underway.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 41 was 1.0 consultations per 100,000 practice population (Table 1). This is simialar to the previous week and remains below baseline threshold for seasonal influenza activity (11.0 per 100,000 practice population) (Figure 1). The sentinel GP ILI consultation rate was highest in patients aged 75 years and older (2.5 per 100,000 practice population) (Table 1). Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.
- The Sentinel GP consultation rate for Acute Respitatory Infections (ARI) was 70.7 per 100,000 practice population, this is a decrease compared to the previous week (86.4 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections and Lower Respiratory Tract Infections also decreased compared to the previous week. The age-group specific consultation rate for ARI during week 40 was highest in under one year olds (259.6 per 100,000 practice population).
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 41 decreased to 14.3% (Figure 9).
- The total number of respiratory-related consultations with **Out of Hours (OOH)** doctors in Wales reported to Public Health Wales during week 41 was 1,006, this represents 9.1% of all 11,073 reported consultations with OOH doctors, a decrease in the number and the proportion reported last week (Figure 8).
- During week 41, 211 specimens received respiratory panel testing from hospital and non-sentinel GP patients with ARI. These results do not include samples tested solely for SARS-CoV2. There was one influenza B, 49 rhinovirus, 10 adenovirus, 10 enterovirus, three human metapnemovirus and one seasonal coronavirus detected in week 41 (Figure 4). Forty-six respiratory specimens were tested from patients in intensive care units (ICU), none were positive for influenza (Figure 5).
- Two surveillance samples from patients with ILI, collected by **sentinel GPs** during week 41, had been received by Public Health Wales Microbiology as at 14/10/2020. One sample tested positive for rhinovirus and one sample was negative for all routinely tested respiratory pathogens.
- Surveillance data suggest that the RSV season is not yet underway with no positive samples in under 5 year olds in recent weeks.
- During week 41, 112 ARI outbreaks were reported to the Public Health Wales Health Protection team, 107 were reported as COVID-19 outbreaks. Forty-nine were in residential homes, 41 were in a school/nursery setting, six were in hospitals and 16 were in a community, mixed or other setting.
- According to EuroMoMo analysis, all-cause deaths are at expected levels for recent weeks.

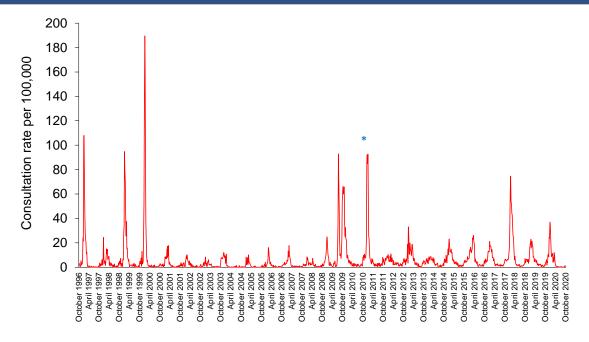
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 11/10/2020).



^{*} The Moving Epidemic Method (MEM) threshold calculated for Wales ILI consultation rates is 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons. Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (week 48 1996 – week 41 2020).



^{*} Reporting changed to Audit+ surveillance system

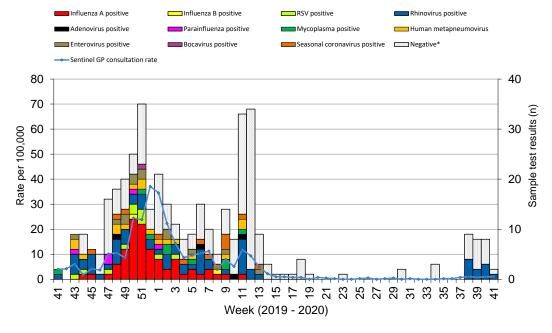
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 36 - week 41 2020 (as of 11/10/2020).

Age						
group	36	37	38	39	40	41
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	0.0	0.0	2.4	0.0	0.0	0.0
15 - 24	0.0	0.0	2.3	0.0	0.0	2.2
25 - 34	0.0	2.0	0.0	0.0	0.0	0.0
35 - 44	0.0	0.0	2.1	2.0	6.2	2.1
45 - 64	0.9	0.9	0.0	0.9	0.9	1.0
65 - 74	0.0	2.1	0.0	0.0	0.0	0.0
75+	0.0	0.0	2.5	2.4	0.0	2.5
Total	0.3	0.7	1.0	0.7	1.0	1.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 36 – week 41 2020 (as of 11/10/2020).

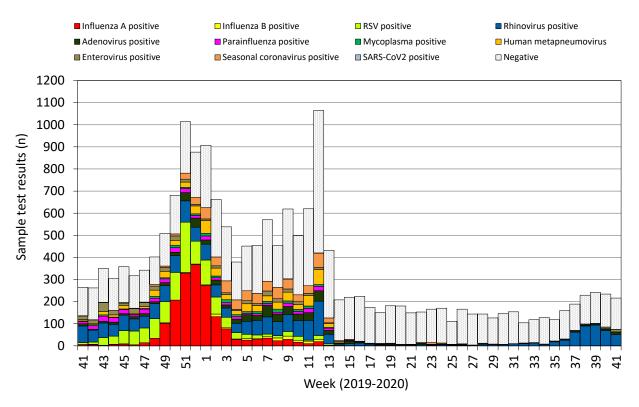
Age						
group	36	37	38	39	40	41
< 1	258.9	248.9	327.7	596.2	670.3	259.6
1 - 4	51.4	134.7	228.9	186.0	214.1	185.9
5 - 14	24.9	61.1	128.3	97.2	80.0	56.2
15 - 24	30.7	58.9	75.2	79.5	60.8	66.4
25 - 34	19.7	47.2	93.0	88.3	75.5	48.7
35 - 44	16.4	30.7	35.5	79.7	95.1	67.6
45 - 64	10.1	42.3	52.4	62.5	78.1	68.8
65 - 74	12.8	29.9	40.5	47.0	62.6	62.5
75+	14.4	43.1	60.4	74.1	82.2	77.7
Total	20.2	49.3	75.1	81.8	86.5	70.7

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 11/10/2020, by week of sample collection, week 41 2019 - week 41 2020.



^{*} Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.

Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 11/10/2020 by week of sample collection, week 41 2019 to week 41 2020.



Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre. This chart summarises individual test results, patients who are positive for multiple infections within a given week will appear multiple times.

Figure 5. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 41 2019 to week 41 2020.

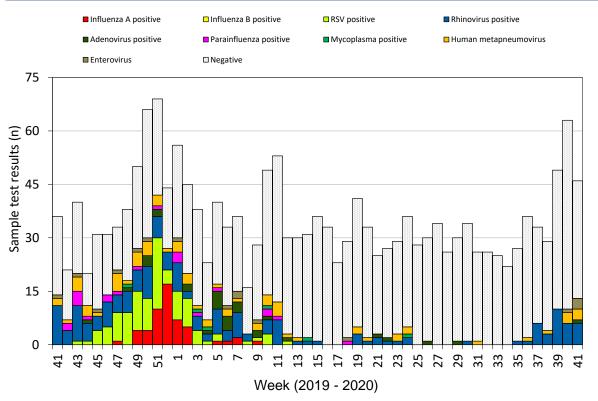
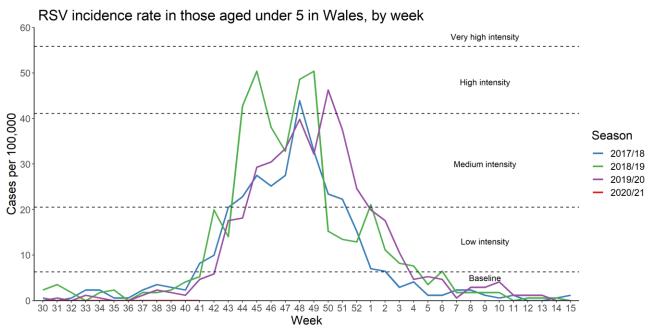


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to week 41 2020.



No samples have tested positive for RSV in under 5 year olds since week 30 2020.

Out of Hours consultations and calls to NHS Direct Wales

Figure 7. Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 11/10/2020).

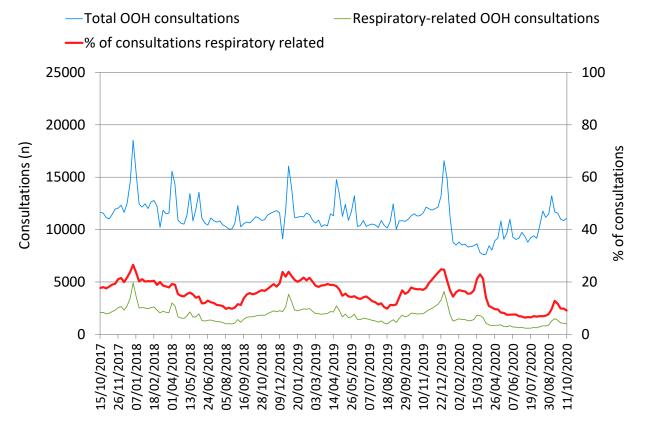
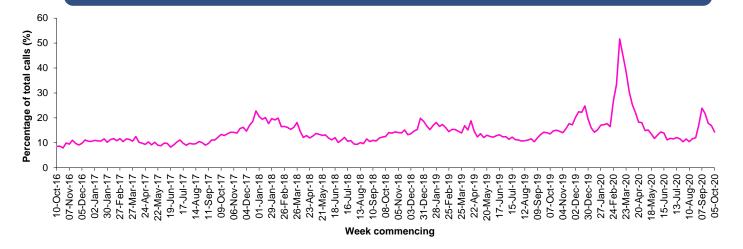


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 41 2016 - week 41 2020 (as of 11/10/2020).



¹ Data supplied by Health Statistics and Analysis Unit, Welsh Government.

Flu related calls are the sum of calls recorded as 'cold/flu', 'cough', 'headache', 'fever' and 'sore throat'. Following changes to the NHS Direct calls system, including the start of the 111 pilot, there has been a change in the way in which denominator data are calculated for this chart, NHS Direct Wales now count the total number of nurse triaged calls (ie calls which could have symptom data recorded against them), note that 111 includes out-of-hours calls.

Influenza Vaccine Uptake in Wales

Table 3. Uptake of influenza immunisations in GP Practice patients, school children and NHS staff in Wales 2019/20 (as of 06/04/2020).

Influenza immunisation uptake in the 2019/20 season				
People aged 65y and older	69.4%			
People younger than 65y in a clinical risk group	44.1%			
Children aged two & three years	50.7%			
Children aged four to ten years*	69.6%			
NHS staff	55.8%			
NHS staff who have direct patient contact	58.7%			

^{*} In school sessions carried out so far.

The end of season report Influenza in Wales 2018/19 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.

Link to report: http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=55714

Influenza vaccination uptake data for the 2020-21 season will be reported later in October.

Influenza activity – UK and international summary

- As of week 39, indicators for influenza show low levels of activity in the UK. GP ILI consultations remained stable in Scotland at 0.3 per 100,000, well below the baseline intensity threshold. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 2.1 per 100,000, well below the MEM threshold for baseline activity (12.7 per 100,000). Syndromic surveillance indicators for influenza decreased or remained stable in weeks 38 and 39.
- During week 39, two (0.3%) of the 592 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (one influenza A(not subtyped) and one influenza B). UK summary data are available from the Public Health England National Influenza Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that as of week 40, influenza activity remained at inter-seasonal levels across the WHO European Region. During week 40, a total of 163 sentinel specimens were tested for influenza, none of which were positive.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 12/10/2020 that globally, influenza activity was reported at lower levels than expected for this time of year, though increased detections were reported in some countries. In the temperate zones of the southern hemisphere, influenza activity remained low or below baseline. In the Caribbean and Central American countries, there were no influenza detections reported. In tropical South America, tropical Africa and Southern Asia there were sporadic or no detections across reporting countries. In South East Asia, increased influenza detections were reported in Cambodia and Lao. In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels. Worldwide, of the very few detections reported, seasonal influenza A(H3N2) viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 09/10/2020), during the time period from 14/09/2020 27/09/2020,
 National Influenza Centres and other national influenza laboratories from 57 countries, areas or territories
 reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System
 laboratories tested more than 50,521 specimens during that time period, 99 were positive for influenza
 viruses, of which 60 were typed as influenza A (50 influenza A(H3N2) and 10 influenza A(not subtyped))
 and 39 influenza B (of the characterised influenza B viruses five belonged to the B-Yamagata lineage and
 17 to the B-Victoria lineage).

Source: WHO influenza update:

http://www.who.int/influenza/surveillance_monitoring/updates/en/

Update on influenza activity in North America

The USA Centers for Disease Control and Prevention (CDC) report that during week 40 (ending 03/10/2020) influenza activity remains low in the United States. Nationally, 17 (0.2%) out of 7,774 specimens have tested positive for influenza in week 40, of these positives nine (52.9%) were influenza A and eight (47.1%) were influenza B. Further characterisation has been carried out on 5,755 specimens by public health laboratories, and one tested positive for influenza, an influenza A(subtyping not performed).

Source: CDC Weekly US Influenza Surveillance Report http://www.cdc.gov/flu/weekly/

• The Public Health Agency of Canada reported that during weeks 39-40, no influenza detections and no influenza activity was reported across the country. The percentage of visits to healthcare professionals that were due to ILI was 0.4% in weeks 39 and 40, similar to previous weeks. The percentage of tests positive for influenza was 0% during weeks 39 and 40.

Source: Public Health Agency of Canada

https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html

Coronavirus disease 2019 (COVID-19) - UK and international summary

- The number of confirmed cases in Wales reported as at 13/10/2020 is 31,370, with 764 newly reported in the previous 24 hours. The cumulative number of suspected COVID-19 deaths in confirmed cases in hospitals and care homes reported to Public Health Wales is 1,678, with five new deaths reported in the previous 24 hours. The cumulative number of registered deaths in Welsh residents where COVID-19 was mentioned in the death certificate as at 2020 week 39 was 2,583. Latest COVID-19 data from Public Health Wales is available from: https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/ Public Health Wales produce a daily statement on COVID-19, available from: https://covid19-phwstatement.nhs.wales/
- As at 13/10/2020, there are 634,920 reported confirmed cases of COVID-19 in the UK, of which 17,234 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 43,018, with 143 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/? ga=2.47134183.1732144231.1599825067-744978499.1577716555
- As at 13/10/2020, WHO reported 37,704,153 confirmed COVID-19 cases globally, with 269,975 reported in the previous 24 hours. There have been 1,079,029 deaths, of which 4,089 were reported in the previous 24 hours. Daily WHO situation updates are available from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On 02/07/2020 WHO reported nine additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including five associated deaths. Globally, 2,562 laboratory confirmed cases of human infection with MERS-CoV, including 881 associated deaths, have officially been reported to WHO since 2012.
 - Source: WHO Global Alert and Response website: http://www.who.int/csr/don/archive/year/2020/en/
- The majority of the MERS cases continue to be reported from the Middle East, and specifically from Saudi Arabia. Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: https://ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus
- Further updates and advice for healthcare workers and travellers are available from WHO: http://www.who.int/emergencies/mers-cov/en/ and from NaTHNaC: https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages

Human infection with avian influenza A(H7N9), China – latest update from WHO

- The latest WHO Influenza at Human-Animal Interface summary (09/05/2020 to 10/07/2020) reports that no new cases of avian influenza A(H7N9) were reported. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported: http://www.fao.org/ag/againfo/programmes/en/empres/H7N9/Situation_update.html
- The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it
 is important that clinicians are aware of the possibility of human infection with animal influenza, in persons
 presenting with severe acute respiratory disease, while travelling or soon after returning from an area
 where avian influenza is a concern. WHO Global Alert & Response updates: http://www.who.int/csr/don/en/

Links:

Public Health Wales influenza surveillance webpage:

http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480

Public Health Wales COVID-19 data dashboard:

https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-

Public/Headlinesummary

GP Sentinel Surveillance of Infections Scheme:

http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27918

NICE influenza antiviral usage guidance:

http://www.nice.org.uk/Guidance/TA158

Wales influenza information:

https://phw.nhs.wales/topics/flu/

England influenza surveillance:

https://www.gov.uk/government/statistics/weekly-national-flu-reports-2019-to-2020-season

Scotland influenza surveillance:

https://www.hps.scot.nhs.uk/a-to-z-of-topics/influenza/#data

Northern Ireland influenza surveillance:

https://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza

European Centre for Communicable Disease:

http://ecdc.europa.eu/

European influenza information:

http://flunewseurope.org/

Advice on influenza immunisation (for NHS Wales users)

http://nww.immunisation.wales.nhs.uk/home

For further information on this report, please email Public Health Wales using: surveillance.requests@wales.nhs.uk